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ABSTRACT

ION DETECTOR

5 An ion detector for a mass spectrometer is
disclosed comprising a microchannel plate 8 which
receives ions 12 at an input surface and releases
electrons 16 from an output surface. A detecting device
is arranged to receive at least some of the electrons 16
emitted from the microchannel plate 8. The detecting
10 device receives electrons 16 on a first portion of the
detecting device at a first time t_1 and receives
electrons 16 on a second different portion of the
detector at a second later time t_2 . Time-varying
electric and/or magnetic fields are applied between the
15 microchannel plate 8 and the detecting device to guide
electrons 16 emitted from the microchannel plate onto
different regions of the detecting device in a time
varying manner.